

## *Special Study Paper:*

The ADMADE Foundation: Building Conservation Solutions for Zambia



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## Introduction

The original premise of the ADMADE program was that local residents of game management areas would provide critically needed assistance to conserving wildlife in Zambia if provided a share of the revenue benefits from the legal, commercial uses of wildlife in their area. Using mostly customary structures of administration for implementing this design, the ADMADE program was strongly welcomed by traditional rulers and their subjects. Since its early beginning in 1989, ADMADE has undergone numerous transformations and realizations about the complexities and opportunities for engaging communities as partners in managing wildlife protected areas. Now, ten years later, the results of ADMADE have revealed much about this management approach.

What was perhaps an attempt to 'buy' community support for conservation in its early stages, ADMADE today is an encompassing process of community empowerment over the use and management of natural resources as an economic basis for overcoming rural poverty. Zambia now stands on the threshold of a very real and positive era of enlightenment for the role communities can play in helping fuse new partnerships for conservation and tourism development. For the first time since Zambia's Independence, communities in ADMADE areas have begun to recognize their rights, responsibilities, and benefits for developing and conserving wildlife resources on communal lands. Changes and events are rapidly unfolding in a number of ADMADE areas that demonstrate the resolve and capacity by communities to organize and lead themselves as responsible governing institutions for enhancing community benefits from their wildlife resources. These experiences are giving Zambia many compelling lessons for how and why resource management authority should be decentralized to local communities.

Ten years have brought ADMADE along a very long and eventful road, a distance that has certainly been fueled by dedicated leadership and foresight by the Zambian Government, which recognizes it as an important rural development program. A new Wildlife Act now enshrines the very framework of the ADMADE program and legally instituted Community Resource Boards provide a democratic and transparent way for every household to participate in the program. Members to these Boards have formalized Community Constitutions that define rules and regulations for how elected leaders should serve their communities to better improve living standards through profitable and sustainable management of natural resources. Land use planning has become a community-wide process where regulations on resource use are self-imposed to increase wildlife production and reduce land use practices destructive to other natural resources. Training of skills and technical information is now being provided throughout the year for community participants of ADMADE, based on an accredited curriculum that is reviewed each year as new lessons emerge and training needs change.

Despite these achievements, ADMADE is still very young. Stronger and with much promise, ADMADE is far from having the national impact on resource conservation and rural development as it could have. In many ways it is at a crossroads. Having steered the program this far with relatively few roadmaps to success other than by a self-monitoring process used to define and redefine its approaches, ADMADE now has a much better basis for navigating its future and solving problems it has struggled with in the past. But at this crossroad, ADMADE's

capacity to build on this foundation will depend very much on the level of recognition and support Government gives communities for their role in managing wildlife and other renewable resources. Ownership of a resource as valuable as wildlife will likely be contentious. Communities will undoubtedly seek greater control and larger revenue shares from this resource to justify their own level of commitment and involvement as co-management partners with Government. Communities will rightfully test their ownership rights for the resources they produce and will question how special licenses are issued and may even challenge Government authorities for loss revenues these licenses cause. Communities will expect greater transparency for the way lease agreements are awarded and will likely demand full participation in the decision-making process as beneficiaries to these agreements. And communities, whose only source of income may be from ADMADE, will undoubtedly request greater control over how their wildlife income is reported and remitted to their accounts.

If at this cross-road where ADMADE now stands, these needs are honored promptly and fairly, then ADMADE will sweep across Zambia and a gateway for economic and conservation activity in this resource sector will be opened. The people of Zambia hear so much about a tourism economy that promises hope and prosperity for their country. Such an economy will only be possible if it can develop a competitive advantage for its wildlife products in a global market where Zambia must be able to compete successfully. An ADMADE program fully supported by the Zambian Government and its donor partners is perhaps the most important key needed to unlock this promise.

In order to provide this support, clear understanding of where it is needed and how best to provide it is required. This paper addresses some of these issues by examining the various facets important to ADMADE and what support or steps will be needed to encourage communities throughout Zambia to keep and manage wildlife as an economic resource. The Zambian Wildlife Authority (ZAWA) fully embraces the principle of developing communities as co-managers of wildlife resources. The futility of trying to rely exclusively on policing tactics to enforce communities to cooperate with the Wildlife Act is a non-traditional, non-African approach that past efforts have proven largely counter-productive. A community-approach to conservation is African, and in terms of cost, is also good business for all partners involved. The secret to applying this approach may well depend on trust, trust among its partners for supporting the lessons the ADMADE experience has contributed to conservation thinking in Zambia.

## **The ADMADE process: how it works, how well it works and where the bottlenecks still are**

### **1) How it works**

The ADMADE process is driven largely by a community organization structured through village area groups (VAGs). At the head of the organization is the Community Resource Board, a statutory body legally recognized under the Zambia Wildlife Act No. 12 of 1998 and registered as a member of The Registered Societies of Zambia. To serve on the Board, members must be democratically elected by their own VAG and must meet certain certifiable qualifications when first nominated. Elections are independently monitored to verify free and fair voting. Chairpersons of these Boards are elected from among its members.

Chiefs serve as Patrons, who provide cultural and social stewardship to ADMADE activities by helping build harmony and improving accountability of the elected leaders. Previously they were the Chairpersons of the Wildlife Management Sub-authority, which was the earlier community leadership structure. Traditional powers of the chief are recognized and greatly respected in the new ADMADE structure. However, with the legal recognition of the Community Resource Boards (CRBs), there is a significant shift of responsibilities for much of ADMADE's implementation to elected leadership. Functionally, this is carried out through three different technical committees that facilitate and supervise the management needs of community development, natural resources, and financial accountability. The primary tasks of these committees are to ensure VAG-level participation in each of these activities, much of which is coordinated and directed by VAG committees made up of peer groups from their respective community. Where community participation may have been limited to only 10 to 20 people with the old ADMADE structure, formal participation under the new structure now commonly exceeds 80 to 140, though levels of overall participation are much higher. In addition, educational standards among key ADMADE community leaders have also greatly improved with the new structure. This is because community members now exercise their choice through the ballot, which has clearly demonstrated the preference to have leaders with qualifications based on education and proven performance.

A full-time ZAWA (NPWS) officer trained in CBNRM skills is stationed in each ADMADE area and is called a unit leader. Together with his supporting staff, the unit leader supervises residents employed by the CRB to manage and police the natural resources in their area. Known as village scouts, they not only monitor the resource and protect against its illegal use, they also assist local farmers in guarding crops from problem animals and help educate members in the community about ADMADE. Currently there are over 400 trained and employed by communities in about 16 game management areas. Supervising the unit leader is the local Resource Management Committee, made up of elected members from each VAG. This committee is responsible for evaluating performance of village scouts, preparing resource management plans and budgets, setting hunting quotas and developing land use plans.

Supporting the above process is a well-developed training institute, called Nyamaluma, developed specifically for the training needs of community residents participating in ADMADE. Soon to be upgraded to a college, the institute has an accredited curriculum of 15 courses in CBNRM-related skills. The training emphasizes a range of skills that complement the overall technical needs of ADMADE in resource management, community development and financial management but emphasizes community participation, collection and use of data, and self-evaluation of management targets. Combined with a highly developed monitoring and data analysis capacity, the institute is able to carry out relatively rapid appraisals of ADMADE progress in the various areas it operates and to respond with appropriate adjustments to training and curriculum needs. Through this kind of training the attitude of local communities living in GMAs is now positive towards resource management.

The Wildlife Conservation Revolving Fund (WCRF) serves as a centralized revenue collector for wildlife licenses and fees on behalf of the CRBs and is responsible for making these revenues known to the CRBs and remitting them to their accounts. Certified community bookkeepers are required to report quarterly to WCRF on how community funds are used and help ensure proper financial controls are followed. Periodic audits of these book-keepers are carried out by

both WCRF and Nyamaluma Institute to verify accuracy of their reports and to investigate any alleged financial abuses.

Supporting this process is the revenue derived from statutory fees imposed on commercial wildlife tourism in the area and this source is currently almost exclusively from safari hunting. While appreciable, the actual revenue collected and returned to the community is well below the full economic value of the resource. This point is especially relevant to the objective of ADMADE, since communities rely on these revenues to manage and protect the resource while also providing economic solutions to the rural development needs of the area. Competing interests of other interested parties obviously come to bear on the actual shares. Since ADMADE's beginning, these shares have not altered and represent 37.5% of animal fees and 75% of concession fees. In addition, revenues remain almost exclusively derived from safari hunting as opposed to a more diversified source of wildlife income.

## **2) How well does it work?**

A key requirement to ADMADE's effectiveness is good community leadership. Democratic elections that are externally supervised and monitored have proven extremely helpful in identifying competent and trusted people who are prepared to take their duties seriously as ADMADE leaders. Not only does it become easier to transfer skills and knowledge to such people, it also becomes far more possible for these same people to develop greater grass-roots participation in ADMADE through the various committees they serve on and projects they may help initiate.

Community Constitutions have also proven to be an important instrument for maintaining basic guidelines and standards for good local governance. A number of breaches over financial procedures and codes of leadership have already been self-corrected by complying with these constitutions. They also promote confidence among elected leaders by identifying the powers they have and how to exercise them without fear of being misjudged or misunderstood by the traditionally appointed leaders in the community. The potential for such conflicts does exist and varies according to the personalities of the individual chiefs, who may not welcome power sharing with their subjects. ADMADE has accepted the risks of such conflicts in order to build accountable, administrative structures for achieving ADMADE objectives of resource management and community development.

The organizational structure, as defined in these Constitutions and in the Zambia Wildlife Act, has proven to be manageable by most communities now practicing ADMADE. With little or no help from outside, many communities are convening meetings regularly and showing confidence and competency for conducting their ADMADE business. This has not been true in all cases, however, and correlates with leaders who lack experience or have experienced frustrations with their local chiefs. In such cases, it becomes necessary to support such communities with additional guidance and facilitation. The role of Nyamaluma and its collaborating partners, particularly Peace Corps, has been especially helpful in this regard.

The ADMADE process also reduces tension between Government and communities over issues on wildlife law enforcement. This is principally because the onus of controlling wasteful resource use practices is now with the community, which stands to gain financially from these efforts. As a result, Government and communities can now focus on a more positive relationship

for finding better ways of supporting community-based resource management while fostering investment opportunities with the private sector. This is being done in various ways: 1) representation of the Community Resource Boards on the Zambia Wildlife Authority Board, 2) more pro-active monitoring of ADMADE by Nyamaluma Institute to identify problems constraining community success in solving certain problems themselves, and 3) encouraging higher standards of CBNRM commitment by safari operators with a publicly recognized certification of these standards.

Where CRBs are formed and VAGs are functioning, there is growing evidence to the very real and positive value of community-based management to conservation and reduction of rural poverty. This is because community leaders, once elected by their peers, recognize that lasting solutions to their problems can only come from the community itself and that wildlife does represent an economic value that can stimulate community action to support these solutions. Pragmatic and innovative approaches to conservation are emerging as a result:

- a. employment of registered firearm owners to police crops
- b. organizing poachers into 'reformed poachers clubs' with assistance to become better farmers
- c. employment of poachers as assistant village scouts
- d. drama clubs to educate against the use of snares and support the goals of ADMADE
- e. formation of food security committees to promote food production in certain VAGs where snaring is a problem
- f. community imposed restrictions on fishing camps to secure safe zones for animal crossings along national park boundaries
- g. VAG-based land use plans that restrict community access to waterholes and promote the use of community revenues to construct wells
- h. recruit VAG-based voluntary village scouts to police against snares, some VAGs have over 30 and have greatly reduced the number of snares.

Use of data to support community decisions for improving resource management is well developed by ADMADE and is perhaps one of the most compelling examples that demonstrates community capacity to manage their natural resources. Information on use and abundance of resources as well as use of local manpower to monitor and protect these resources are being systematically collected by local residents themselves, a CBNRM achievement unprecedented in the region. Skills and procedures for analyzing this information are now being used by members of the Resource Management Committee to help set hunting quotas, design land use plans, improve performance by local management staff, and budget for resource management plans. ADMADE, through its Nyamaluma Institute, is developing parallel efforts to apply this information-based planning approach to community development and financial management needs for the community.

### **3) Where the bottlenecks still are**

- a. ADMADE policy development and support

Adaptive management has been a key feature to much of ADMADE's success, relying on programmatic flexibility to innovate and test novel methods as well as a willingness to accept mistakes as part of the learning process when these innovations fail. In many ways this has been ADMADE's greatest strength and has allowed it to evolve and progress with new policies that

match program needs with well tested solutions. This approach depends on conveying lessons and program results into the right channels for effective decision-making and program leadership. As ADMADE expands and as more community issues receive public debate, there will be an ever-growing need for matters to be referred to senior NPWS (ZAWA) officers for their understanding and support. This link has proven difficult to maintain in recent years, and communities on a number of occasions have questioned the level of support their efforts are receiving by NPWS (ZAWA). One reason for this has been the constant distractions away from ADMADE by NPWS (ZAWA) leadership due to the restructuring process now ending its third year. To minimize such problems, NPWS (ZAWA) requires a more streamline and reliable way of maintaining close contact with ADMADE activities and needs. To do this, it is proposed that NPWS (ZAWA) establish an ADMADE secretariat consisting of core professional staff at its head office to coordinate and disseminate information for a more rapid response to programmatic needs throughout the country. The secretariat would also include the relevant personnel from the Commercial Section of NPWS (ZAWA) to ensure financial integrity of ADMADE is maintained and financial information is fully accessible. Similarly, membership by Nyamaluma Institute would enable monitoring results to reach the appropriate offices while also responding to the continued development of CBNRM policy and collaboration of NGO partners in these efforts. By consolidating the relevant ADMADE professional expertise into a secretariat, ZAWA would be better able to maintain and develop more effective policies to support CBNRM in Zambia. It would also help improve coordination among its contributing partners in support of these policies while also facilitating improved consultation with ADMADE's various stakeholders. It is further proposed that the secretariat support an ADMADE directorate made up of the representatives of the key stakeholders participating in the program and would include Government, private sector, community, and NGO/donor partners. A key task of the secretariat would be to communicate the results of these directorate meetings to the ZAWA Board for future strengthening of the ADMADE policy.

#### b. Private sector partnership

The ADMADE process was originally intended to promote partnership building between communities and safari operators in their area as a basis for a more competitive tourism industry in Zambia. Unfortunately, current leasing arrangements for tourist concessions do not formally involve community leadership and therefore do not foster a strong co-management relationship between these two parties. This should be one of the main objectives with the new round of leasing expected in 2000 for those ADMADE areas having Community Resource Boards to ensure lease agreements include a range of possible ways this co-management relationship could be better supported. For example, it might be desirable to require operators to maintain an area manager in the concession year-round to work more closely with the community on resource protection efforts and human needs contributing to resource disturbances. Current lease arrangements may not facilitate such co-management relationships and represent potential threats to ADMADE in terms of lease periods, enforcement of lease agreements, and concession allocation procedures.

#### c. Financial management systems supporting ADMADE

The ADMADE process assumes communities will be able to manage their wildlife with budgets that reflect the needs of the resource and will receive their revenue shares promptly enough for management plans to be implemented. Unfortunately, this assumption is not always met.

Contributing factors include poor internal controls at the community level, delayed and incomplete revenue transfers to the community, and insufficient visits by external inspectors to maintain financial standards for ADMADE. Continued work in this area will need to focus on continued audit inspections, which has only just begun under the ADMADE Sustainability Project, more rigorous training of Financial Management Committee members, and a more streamline, accountable system for transferring funds to the Community Resource Boards.

d. Community leadership

The potential problem with resistance by local Chiefs and previous members of the Sub-authority to relinquish control and influence over ADMADE activities is not a trivial one and was not fully appreciated at the time Community Resource Boards were formed. In some cases, chiefs have made deliberate attempts to frustrate and intimidate CRB leadership, causing confusion and fear among CRB members when trying to assert their skills and responsibilities. This problem has been noted in two out of the six units thus far surveyed and for this reason is regarded as a potential threat to ADMADE's stability. It also diminishes opportunities for possible synergism between traditional authority and elected leadership in promoting good community governance. This problem is being addressed through external facilitation by senior Government/ADMADE officials who have interceded to improve dialogue and understanding between the two leadership parties.

e. Start-up costs for new ADMADE areas

Beginning the ADMADE process for most areas requires an initial investment of equipment to help manage and produce enough wildlife to attract commercial interests to the area. This investment from an ADMADE perspective is an investment in the community to develop wildlife as a cash crop for rural development but is too high for rural communities to make themselves. Generally, this investment is below \$75,000 for a given area averaging about 1200 km<sup>2</sup>. Current experience has shown that a full return on this investment is possible in about two to four years, depending on how depleted wildlife is in the area. To encourage further ADMADE expansion across Zambia's wildlife protected estate, which exceeds 30% of the country's total land area, it is recommended that ZAWA establish an ADMADE Area Development Account to help finance the investment communities may require to introduce ADMADE as a form of land use on their lands. Such a development account would give ZAWA the capacity to negotiate matching agreements with complementary commitments from participating communities for facilitating the wildlife recovery process in their respective areas.

f. Revenue shares for wildlife producer communities

As mentioned already, ADMADE shares to the local community have not changed since the program began in 1989 and represent 37.5% of animal fees and 75% of concession fees. These shares indicate a severe tax burden imposed on the community for producing wildlife, making it less likely for communities to realize the full economic incentive for producing wildlife. From a management level, it also reduces the funding capacity to manage the resource. For Zambia to gain the complete economic and conservation benefits from ADMADE, it is recommended that Community Resource Boards receive the entire value of animal fees and concession fees and that these sums be taxed by ZAWA by an amount of 17.5%, as would be taxed by commercial game ranchers.



#### g. Commitment to hunting quota

ADMADE is training community leaders to use locally collected data to set hunting quotas. The procedures result in relatively accurate decisions that reduce risks of over-hunting and provide communities with a sense of ownership and responsibility for their wildlife resources. However, on numerous occasions these decisions are not accepted by higher authorities and result in over-hunting of species of economic importance to the Community Resource Boards. A contributing factor to this problem is that hunting quotas are easily changed during the hunting season and such changes are made not on technical grounds but often because of political pressure or for monetary reasons. The problem has reached an alarming scale and is undermining the sustainability of the hunting industry. Such interference with management decisions and the process of involving communities in the management effort is a serious threat to the ADMADE. One suggestion is to gazette all quotas, including those used for special licenses, as a Statutory Instrument so that ZAWA officers and CRBs are protected from external pressures to change hunting quotas.

### **The ADMADE impact: a test of economic, wildlife and social indicators**

In order to evaluate the impact of the ADMADE program, verifiable measures of success are used to assess how well the program is achieving its objectives. Not always appreciated is the enormous challenge CBNRM programs, particularly those that operate at a national level, face in developing such monitoring and evaluation systems for long-term results analysis. ADMADE has been very conscious of this need and has developed a practical database approach that provides both policy makers and field practitioners with the results to guide their efforts and decisions for program needs.

An appreciation of ADMADE's potential impact is perhaps best evaluated by assessing its current level of success in those areas where CRBs are established and the primary conditions for ADMADE to succeed are in place. Indicators for assessing this impact include economic growth, resource management trends and social and economic benefits to community residents.

#### **Economic indicators**

##### **Revenue trends:**

ADMADE areas with CRBs: Since 1997 income accrued to ADMADE based on accumulated earnings through August for a given year was 8.4% (an increase of \$32,366 from 1997 figure of \$385,312).

ADMADE areas without CRBs: During the same period, income based on the same period declined by 7.4% (a decrease of \$17,791 from the 1997 figure of \$239,166).

Though preliminary, these results do suggest communities that are organized under the new CRB structure are more capable of contributing income growth to the tourist sector than those lacking this structure. Factors that may have contributed to this difference were 1) broader public awareness and acceptance of ADMADE, 2) greater community involvement in resource management efforts, and 3) more effective leadership structures to implement land use decisions.

### Correlations with CBNRM commitment by safari operator

In 1998, ADMADE recognized those operators who demonstrated a commitment in building a co-management relationship with their community partners, as based on a scoring of 10 different criteria. As the Table below shows, companies (excluding Luawato because of voluntary closure of hunting area) who were awarded the certification, called the Conservation Bullet Award, increased their income by 8 % and those not awarded showed a striking loss of income by 17%.

Table 2. Revenue by Co-management Status

Hunting block	Status	1997	1998	Difference
Lunga-Busanga	Distinction	\$31,765.00	\$29,550.00	(\$2,215.00)
Mwanya	Distinction	\$60,950.00	\$65,575.00	\$4,625.00
Luawata	Certified	\$102,950.00	\$60,000.00	(\$42,950.00)
Mumbwa-West	Certified	Stopped hunting early in 1998 due to interference with non-resident		\$750.00
Nyampala	Certified	\$72,155.00	\$73,660.00	\$1,505.00
Lunga-Luswishi	Certified	\$44,020.00	\$60,400.00	\$16,380.00
Chanjuzi	Non-recipient	\$73,625.00	\$72,625.00	(\$1,000.00)
Chifunda	Non-recipient	\$84,550.00	\$51,400.00	(\$33,150.00)
Chikwa-Fulaza	Non-recipient	\$89,630.00	\$53,700.00	(\$35,930.00)
Kasonso	Non-recipient	\$38,425.00	\$69,380.00	\$30,955.00
Mulobezi	Non-recipient	\$91,620.00	\$79,925.00	(\$11,695.00)
Sichifulo	Non-recipient	\$91,230.00	\$60,585.00	(\$30,645.00)

These results would suggest that companies able to commit resources toward building a co-management relationship with local communities will more likely increase profits than lose profits.

### Secondary sources of investment through the private sector

If tourist operators view communities as potential assets to their own business interests, then examples of their willingness to invest in these areas should correlate with those areas where communities have demonstrated their capacity to manage and produce wildlife. Such a correlation would also suggest that tourism development will be positively impacted by a successful ADMADE. Results given in the table below strongly support these predictions as based on investments in the hunting areas over the past four months, excluding the required assistance of patrol rations and transport for law enforcement operations.

Examples of private sector investment for improvements In the hunting area over the past 4 months		
Area	Communities with well established CRB structures	Communities without established CRB structures
Chikwa	30-40% increase in safari road network, cash incentives for poacher arrests, funding of food security projects	
Chifunda	nil	
Chanjuzi	nil	

Mwanya	support for road access to area, establish second safari camp, extend safari roads by about 20%,donation of grinding mill	
Nyampala	Large local employment for road network, support food security with fertilizer and maize seed	
Luawata	Large local employment for road network, pledge to build CRB office	
Mumbwa		nil
Sichifulo		nil
Mulobezi		nil
Kasonso		nil
Lunga-Busanga		nil
Lunga-Lushwishi		nil

### Diversifying wildlife income for CRBs

Current income levels are derived almost exclusively from safari clients. Dependence on safari income is fully justified because of the high market value the industry can demand, provided suitable trophy quality animals are available. Unfortunately, ADMADE has not progressed very far in developing additional markets that might add value to this resource, particularly in the form of local employment. Safari hunting, for example, generates relatively few permanent jobs for local residents, normally about 17 for the hunting season, although temporary employment early in the hunting season can be appreciable.

Economic benefits from ADMADE through increased local employment in the tourism sector could be further developed by marketing appropriate community-based services. One area where this would be relatively easy to achieve is by requiring hunters who come to hunt on a national game license to be supported with a qualified team of local residents to offer various services. In principle such hunters should be regarded as tourists who visit a communal area for hunting recreation. Community services could be priced as part of the packaged national game license hunt in a communal area and could thus create substantial opportunities for local employment.

To adopt this concept while also reducing conflicts between safari clients and national licensed hunters, it is recommended a single quota be given for the hunting area. By mid-season the operator would be required to announce what animals on this quota he is not able to market. These animals would then be marketed commercially to Zambian-based hunters who, in turn, would guarantee employment to residents for providing such skills as tracking, cooking, carriers, skinners, etc. Trophy quality animals for certain species key to the safari industry would be disallowed unless hunters pay full commercial value for these animals. Conceivably, hunting areas would be able to sustain as many as 5 to 10 such hunts, each employing about six people. Daily rate for these services might be valued at \$50. It would be necessary to gazette this fee as a statutory instrument and require that payment be made directly to CRBs. Employment could include three to six groups of service providers, providing as many as 18 to 36 new jobs with an additional income flow of about \$3000 into the community. Based on current needs assessment, such a modest injection of income into the community would provide a significant source of financial help for food security. To test the above model, it is recommended that a pilot scheme